Appendix 3: Summary tables of studies by outcome

Table A1: Studies examining the effect of income on children's cognitive and educational outcomes

Study	Country	Method	Source of variation in money		Negative effect	No effect	Positive effect	Non-linear effect?	Notes
Khanam and Nghiem (2016)	Australia	Observational	Variation in household income over time				PPVT, Matrix Reasoning test, literacy and maths scores.		
Milligan and Stabile (2011)	Canada	Quasi-experimental	Variation in Child Benefit due to province, time and family type				PPVT; Maths test score; grade repetition; learning difficulty. All but learning difficulty are driven by results for boys.	Results more likely to be significant for low education sample (not necessarily non-linear effect: many higher educated families won't have received benefit).	
Manley et al (2015)	Mexico	Quasi-experimental	Time of entry into programme (randomised) and numbers and ages of children			Cognitive WASI significant at 10% only.	Verbal WASI.	Low income sample.	
Fernald et al (2009)	Mexico	Quasi-experimental	Timing of entry (randomised) and differences in cash due to number and ages of children.				Verbal and cognitive scores (Wechsker scale of intelligence)	Only significant for children of mothers with low education	
Fernald, Gertler and Neufeld (2008)	Mexico	Quasi-experimental	Timing of entry (randomised) and differences in cash due to number and ages of children.				Long-term memory; short-term memory; visual integration.	Low-income sample.	

Study	Country	Method	Source of variation						
Black, Devereux et al (2014)	Norway	Quasi-experimental	Childcare subsidy			Effects on written exam largely insignificant.	GPA and oral exam in Grade 10 (age 13-16).		Subsidy does not seem to affect childcare use, so is in effect an income boost.
Løken (2010)	Norway	Quasi-experimental	1970s oil shock in one region of Norway			Years of education obtained			
Løken, Mogstad and Wiswall (2012)	Norway	Quasi-experimental	1970s oil shock in one region of Norway				Years of education obtained; high-school completion; IQ at 18 (males only).	Unlike Løken (2010), this study investigated non-linearities and found positive results for poorer households.	
Tominey (2010)	Norway	Quasi-experimental	Income shocks identified using average income for 9 travel-to-work areas across 11 cohorts.				Years of completed schooling; high school completion; IQ at 18 (males only)		
Elstad and Bakken (2015)	Norway	Observational	Variation in household income between siblings				GPA	Bigger effects at lower end of distribution	
Cesarini et al (2016)	Sweden	Quasi-experimental	Lottery win		Cognitive skills test for men in armed forces (marginally significant)	GPA, English, Swedish and Maths score.			
Blanden and Gregg (2004)	UK	Observational	Variation in household income between siblings				Probability of not obtaining GCSE A-C; staying on at age 16; obtaining a degree.		

Violato, Petrou et al (2011)	UK	Observational	Variation in household income over time				BAS naming vocabulary score for children from single parent households.		Measured at age 3 and age 5.
Clark-Kauffman, Duncan and Morris (2003)	US	RCT	Random-assignment welfare-to-work programmes.				Cognitive development assessed via maternal report, teacher report and test scores.		No significant effects for children over the age of 5.
Gennetian and Miller (2002)	US	RCT	Random assignment in the Minnesota Family Investment Program				Maternal response on child performance and engagement in school	Sample only single mothers who were long-term welfare recipients.	Bigger effect on boys' performance in school.
Morris and Gennetian (2003)	US	RCT	Random assignment in the Minnesota Family Investment Program			Maternal response on engagement in school only marginally significant at 10%.			Different methodology on same data used by Gennetian and Miller (2002). Income increase accompanied by increase in employment.
Duncan, Morris and Rodrigues (2011)	US and Canada	RCT	Random assignment welfare to work programmes.				Cognitive performance measured by parent, teacher reports or test scores.	Sample primarily low-income.	
Cooper and Luengo-Prado (2015)	US	Quasi-experimental	House price change			College completion.	College enrolment; enrolment in top performing college.		Local house price increases mean both better outcomes for children of homeowners and worse outcomes for children of renters.

Study	Country	Method	Source of income variation						
Lovenheim and Reynolds (2013)	US	Quasi-experimental	Housing boom				Attending a flagship public university rather than non-flagship; attending out-of-state university.	Bigger impact on houses with lower income; no significant impact on high income households.	
Lovenheim (2011)	US	Quasi-experimental	Housing wealth changes				College enrolment		
Akee, Copeland et al (2010)	US	Quasi-experimental	Casino profit allocations				School attendance; probability of high school graduation; years of schooling aged 21.	Biggest effect on the poorest households.	
Dahl and Lochner (2012)	US	Quasi-experimental	Changes in EITC payment between late 1980s and early 1990s.				PIAT maths and reading scores.	Results slightly larger in households with low maternal education.	Results are larger for boys and for younger children.
Shea (2000)	US	Quasi-experimental	Variations in father's earnings due to 'luck' (union status, industry and involuntary job loss from plant closure etc)			Years of completed schooling.			
Morrissey et al (2013)	US	Observational	Variation in household income over time			GPA (no effect of change in eligibility for free lunch).	School attendance; punctuality. GPA (effect of duration of free school lunch receipt.)	Focus on moves in/out of eligibility for free school lunch.	Focus on moves in/out of eligibility for free school lunch.
Blau (1999)	US	Observational	Variation in household income between siblings, cousins and for same child over time			Verbal memory.	PIAT maths and reading; PPVT.		

Burnett and Farkas (2009)	US	Observational	Variation in household income over time				PIAT maths.	Focus is on effect of being below the poverty line.	
Conley and Bennett (2001)	US	Observational	Variation in household income between siblings			High school graduation by 19th birthday.			
Duncan, Brooks-Gunn et al (1998)	US	Observational	Variation in household income between siblings				Years of completed schooling.		Income in early childhood more important than income in middle childhood.
Johnson and Schoeni (2011)	US	Observational	Variation in household income between siblings			Math and reading achievement.			
Votruba-Drzal (2006)	US	Observational	Variation in household income over time				PIAT tests in reading and maths		Controls for home environment.